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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,198	12/21/2001	Merrill A. Biel	22,272-22	9166

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EXAMINER

SHAY, DAVID M

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 04/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/026,148

Applicant(s)

Baal

Examiner

d-stay

Group Art Unit

3739

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-52 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-52 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 3739

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-30, 36 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15 exactly is intended to be encompasses try the term "acellular organisms" is unclear because the claim refers to the cytoplasm, which is defined in the art as material at the interior of a cell. Claims 36 and 37 are indefinite because it is unclear what structure is to be claimed by reciting the activity of the compound when placed in a particular environment.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-9, 11, 15-17, 19-25, 30-32, and 35-39 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Vogel et al.

See column II, line 8 to column 16, line 25.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 15, 18, 31, 33-35, and 40-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilk et al in combination with Vogel et al. Wilk et al teach sterilizing medical

Art Unit: 3739

equipment such as catheters using light applied internally or externally of the surface and the use of a sterilizing solution. Vogel et al teach a solution as claimed that can be used in conjunction with light to kill bacteria or to treat viral conditions. It would have been obvious to be artisan of ordinary skill to employ the solution of Vogel et al to sterilize the long dwelling catheters etc of Wilk et al, upon which biofilms form and to employ the method on other body inserted lumens such as endotracheal tubes and intravenous catheters, since these are equivalent to the catheters of Wilk et al and since these are also recognized in the art as sites which require sterilization, thus producing a method such as claimed.

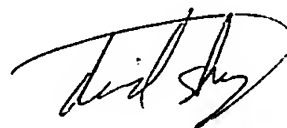
Claims 1, 5, 10, 12-15, 20, and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel et al in combination with Nitzan et al. Vogel et al teach a method of eradicating acellular or cellular organisms as claimed but does not teach adding the surface acting agent prior to the photosensitive material, or a plurality of photosensitive or surface acting agents or the light dosage rate. Nitzan et al teach a method as claimed (The PMNP, which is made from Polymyxin B sulfate, will retain some amount of Polymyxin B sulfate therein, and thus is considered a mixture of a plurality of surfactants) except for the specific time period between the addition of the two agents and the use of benzalkonium. It would have been obvious to the artisan of ordinary skill to employ benzalkonium chloride in the method of Nitzan et al, since this will inhibit bacterial and fungal contamination of the solution and to make the interval between the addition of the two agents between one and 30 minutes since this is not critical and would allow the membranes to be permeabilized prior to addition of the dye or alternatively to employ the surfactants, dosage rate, and photosensitive agents of Nitzan et al in the method of Vogel et al, since Vogel et al specifically state that surfactants may be added, since this would

Art Unit: 3739

improve gel properties and also to employ the photosensitive agents since this would yield a composition also useful against gram negative bacteria, as taught by Nitzan et al, thus producing a method such as claimed.

Any inquiry concerning this communication should be directed to David Shay at telephone number 703-308-2215.

Shay/DI  
March 25, 2003



DAVID M. SHAY  
PRIMARY EXAMINER  
GROUP 330